

# Newborn Screening

## Newborn Screening Panel

Specimen Requirements: Dried Blood Spots.

Total Price: \$96.25

Turn Around Time: 3 to 5 working days. Abnormal results are telephoned to the submitter. Contact the laboratory for further information.

Transport Temperature: Ambient

Screening Tests	CPT Code	Price
<b>Acylcarnitine Disorders by Tandem Mass Spectrometry (MS/MS)*</b> Fatty Acid Oxidation Disorders Carnitine Uptake Defect Long Chain L-3-Hydroxyacyl CoA Dehydrogenase Deficiency (LCHAD) Medium Chain Acyl-CoA Dehydrogenase Deficiency (MCAD) Trifunctional Protein Deficiency (TFP) Very Long Chain Acyl-CoA Dehydrogenase Deficiency (VLCAD) Organic Acidemia Disorders 3-OH 3-CH <sub>3</sub> Glutaric Aciduria 3-Methylcrotonyl-CoA Carboxylase Deficiency β-ketothiolase Deficiency Glutaric Acidemia Type I Isovaleric Acidemia Methylmalonic Acidemia (Cbl A and B) Methylmalonic Acidemia (mutase deficiency) Multiple CoA Carboxylase Deficiency (MCD) Propionic Acidemia	82017	\$11.75
<b>Amino Acid Disorders by Tandem Mass Spectrometry (MS/MS)*</b> <b>ARGININOSUCCINIC ACIDEMIA</b> <b>CITRULLINEMIA</b> <b>HOMOCYSTEINURIA (DUE TO CBS DEFICIENCY)</b> <b>MAPLE SYRUP URINE DISEASE</b> <b>TYROSINEMIA TYPE I</b>	82136	\$4.65
<b>Biotinidase*</b>	82261	\$6.00
<b>Classic Galactosemia</b>	82775	\$13.90
<b>Congenital Adrenal Hyperplasia (CAH)*</b> 21 hydroxylase deficiency	83498	\$11.50
<b>Congenital Hypothyroidism (CH)</b> Thyroxine (T4) testing	84437	\$12.45
<b>Cystic Fibrosis (IRT)</b>	83516	\$12.00
<b>Phenylketonuria (PKU)</b>	84030	\$12.50
<b>Hemoglobinopathies by Isoelectric Focusing</b> <b>HB S/B-THALASSEMIA</b> <b>HB SC DISEASE</b> <b>HB SS DISEASE (SICKLE CELL ANEMIA)</b>	83020	\$11.50

\* Tests referred to the Wisconsin State Newborn Screening Laboratory

Note: Reflex confirmatory TSH testing is performed on all T4 results that are less than 10 ug/dL

Reflex confirmatory HPLC testing is performed on all abnormal hemoglobinopathy screens.

Confirmatory Tests	CPT Code	Price <sup>#</sup>
<b>Hemoglobinopathies by HPLC*</b>	87143	\$34.75
<b>Thyroid Stimulating Hormone (TSH)</b>	84443	\$10.50

<sup>#</sup> Not included in total cost of routine testing panel.

## **Phenylalanine Monitor by Fluorescent Immunoassay**

Specimen Requirements: Dried Blood Spots.

Used to monitor levels in patients diagnosed with phenylketonuria (PKU)

Turn Around Time: 1 to 2 working days. All PKU Monitor results are telephoned to the clinician of record.

CPT Code: 84030

Price: Fee Waived. Phone the laboratory for more information.

Transport Temperature: Ambient

## Newborn Screening Collection and Transport

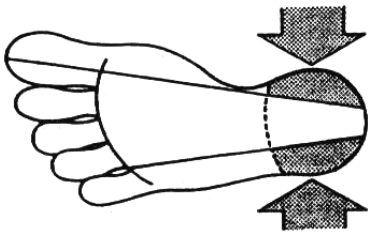
Newborn screening specimen cards for collection of dried blood spot samples are available from the laboratory. See Supply Request Form. These forms contain the requisition form along with the attached filter paper collection device.

Store specimen cards in a cool dry place on edge; flat stacking compresses the filter paper fibers. Do not handle the filter paper portion, as skin oils will prevent saturation.

Complete all the information on the requisition form legibly in block capital letters.

### Sample Collection

The usual puncture site is illustrated below (shaded areas).



1. Sterilize and dry skin. Puncture heel with sterile lancet.
2. Allow large blood droplet to form.
3. Touch filter paper to blood and allow to soak through completely in each circle. Total saturation of the circles must be evident when the paper is viewed on both sides. Do not apply blood to both sides.
4. Use of capillary tubes is not recommended because they tend to roughen the filter paper and cause over absorption.
5. Allow blood spots to air dry thoroughly for 2-3 hours at room temperature. Keep away from direct sunlight and heat. Do not stack filter papers before thorough drying. Protective cover can be used to hold specimen while drying.
6. Cover with end flap only after specimen is completely dry.
7. Transport specimen by mail or courier at ambient temperature within 24 hours of collection.

Note: Specimens may be UNSATISFACTORY if:

- All circles not completely filled (QNS)
- Blood is layered by application on both sides or by multiple spotting
- Filter paper is scuffed or torn
- Specimen is contaminated or improperly dried
- Information is incomplete